

## 1 Advertisement

**Post Title:** Clinical Research Fellow in Imaging

**School/department:** Brighton and Sussex Medical School, Department of Neuroscience

**Hours:** full time or part time hours considered up to a maximum of 1.0 FTE/10PA's per week. Requests for flexible working options will be considered (subject to business need).

**Contract:** fixed term until 31 July 2025 or 3 years from date of appointment

**Reference:** 8219

**Salary:** Clinical academic below the level of consultant (post 2009 scale) pay scale, basic salary dependent on clinical seniority

**Placed on:** 22 April 2022

**Closing date:** 31 May 2022

**Expected start date:** 1 August 2022

Brighton and Sussex Medical School (BSMS) is pleased to offer a Clinical Research Fellowship based in the Clinical Imaging Sciences Centre on the University of Sussex site in Falmer to commence on 01 August 2022.

Applications are invited from qualified medical practitioners who have completed Foundation training or equivalent, and who can demonstrate potential for development as a clinical academic. The post-holder will be based at the BSMS Clinical Imaging Sciences Centre (CISC), which comprises 64-slice PET-CT and 3T and 1.5T MR imaging systems, and will work with academics and radiographers on a research programme that is both relevant to the interests of the Centre and tailored to the interests of the successful applicant. The post-holder will also work on a day-to-day basis supporting the CISC radiographers and provide clinical cover including any medical emergencies. There will also be opportunities to contribute to the novel undergraduate teaching programme in imaging that has been developed at BSMS, including involvement with interactive computer-based imaging practical classes and Student-Selected Components based at CISC.

The post will provide excellent training and experience in imaging research either in PET-CT or MRI or both, and would especially suit someone aiming for an academic career in neuroradiology, neurology, neuroscience or psychiatry. Whilst in post, **the post-holder will be expected to register and complete an MD, PhD** or other research qualification with BSMS or one of its partner universities. **The fees associated with an MD/PhD will be funded by the Centre** as will any associated agreed scanning. The appointment will be for up to 3 years.

Further particulars of the very active and dynamic research and teaching undertaken at BSMS are available on the Medical School website ([www.bsms.ac.uk](http://www.bsms.ac.uk)).

For further information about this post, please contact Professor Itamar Ronen, Academic Director of the Clinical Imaging Sciences Centre (Email: [i.ronen@bsms.ac.uk](mailto:i.ronen@bsms.ac.uk) ; Telephone 01273 877879)

For full details and how to apply see:

[www.sussex.ac.uk/jobs](http://www.sussex.ac.uk/jobs) <https://www.brighton.ac.uk/about-us/working-with-us/jobs/index.aspx>

***The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds***

## 2. Brighton and Sussex Medical School and partners

**Brighton and Sussex Medical School** is an equal partnership between the Universities of Sussex and Brighton together with NHS organisations throughout the South East region. Find out more at: <https://www.bsms.ac.uk/about/index.aspx>

**The Clinical Imaging Sciences Centre (CISC)** is an internationally established research centre within BSMS, with a primary focus on the development and application of advanced neuroimaging methods for the understanding of the brain and of treatment of brain disorders. The range of research projects conducted at CISC represent collaborative efforts between Schools of both the University of Brighton (UoB) and the University of Sussex (UoS), with the aim of developing a new generation of imaging biomarkers of brain function in health and disease. The research portfolio of CISC currently encompasses a variety of themes, effectively bringing together Researchers from BSMS, Psychology, Life Sciences, Informatics and Engineering. Find out more:

<https://www.bsms.ac.uk/research/neuroscience/cisc/index.aspx>

**The University of Sussex** is a leading research-intensive university near Brighton, currently ranked top 20 in all major league tables. Find out more:

<http://www.sussex.ac.uk/about/>

**The University of Brighton** is a complex and diverse institution with a long and distinguished history of applied research. Find out more: [brighton.ac.uk/about-us/](http://brighton.ac.uk/about-us/)

**University Hospitals Sussex** is the regional teaching hospital working across two sites: the Royal Sussex County Hospital in Brighton and the Princess Royal Hospital in Haywards Heath. Find out more: <https://www.uhsussex.nhs.uk/about/>

**Sussex Partnership NHS Foundation Trust** specialises in working with people who are experiencing mental health difficulties and those with learning disabilities, across Sussex, Kent and Hampshire. Find out more: [sussexpartnership.nhs.uk/about-us](http://sussexpartnership.nhs.uk/about-us)

## 3. Job Description

**Job Description for the post of: Clinical Research Fellow**

**Department: Neuroscience**

**Section/Unit/School: CISC, Brighton & Sussex Medical School**

**Location: Clinical Imaging Sciences Centre (CISC), University of Sussex**

**Grade: Clinical academic below the level of consultant (post 2009 pay scale)**

**Responsible to: Professor Itamar Ronen, CISC Academic Director**

### The Post

Brighton and Sussex Medical School (BSMS) seeks to recruit a Clinical Research Fellow to work in the Clinical Imaging Sciences Centre (CISC). This is one of two positions.

CISC houses a 3T and a 1.5T MRI, and 64-slice PET-CT imaging systems for use in research, clinical practice and education. The post-holder will work with academics and radiographers on a research programme that is both relevant to the interests of the Centre and tailored to the interests of the successful applicant. The post-holder will also advise the radiographers on day-to-day matters arising in relation to the clinical services and provide clinical cover in the event of any medical emergency arising at CISC. The post-holder will be working as an operator under the CISC ARSAC certificate holder's delegation, and protocols will be in line with IR(ME)R policies, procedures and protocols. The post-holder will also be expected to make a limited contribution to the teaching of imaging to undergraduate medical students.

Whilst in post, the post-holder is expected to register and complete an MD, PhD or other research qualification with BSMS or one of its partner universities. The fees associated with an MD/PhD will be funded by the Centre as will any associated agreed scanning.

The post will provide excellent training and experience in imaging research. BSMS has an expanding academic community with an interest in imaging, with Chairs in Medical Physics, Psychiatry and Neurology. This post would therefore suit someone aiming for an academic career in neuroradiology, psychiatry, neurology.

The Research topics available include translational studies into neurodegenerative and neuroinflammatory disorders, interactions between the immune system and the brain, neuropsychiatry, and advanced neuroimaging. The prospective supervisors, their research areas, and some examples of projects currently available are listed below – more information is available on the individual web-pages:

Professor Hugo Critchley: Brain-body interactions in relation to psychiatric symptoms. Example project: *Impact of heart-to-brain signalling on neural substrates of emotional learning in adults with ADHD and its modulation by stimulant medication (fMRI study)*.

Dr Alessandro Colasanti: Role of brain mitochondrial function and oxygen metabolism in the pathophysiology of mood disorders. Example project: *Brain bioenergetics and mitochondrial function in the pathophysiology of mood disorders: human experimental studies*

Dr James Stone: Psychopharmacology and imaging of neurochemistry and drug effects in psychiatric diagnoses including schizophrenia, bipolar affective disorder, depression and anxiety. Example project: *Imaging biomarkers of ketamine response in patients with depression*.

Professor Jaime Vera: Relationship between communicable diseases such as HIV or COVID-19 and the development of brain associated diseases including cognitive impairment and neuropsychiatric disorders. Example project: *Characterisation of HIV-associated cognitive impairment in treated people with HIV by functional and structural brain imaging*

Professor Itamar Ronen: In vivo imaging and spectroscopy of inflammation and neurodegeneration, metabolic imaging, neural tissue microstructural investigations. Example project: *Neuroinflammation, axonopathy and energy dysregulation in MS: a combined diffusion weighted MRI and MRS approach*.

Dr Jessica Eccles: Neuropsychiatric effects of connective tissue disorders, particularly as

they relate to anxiety, pain, fatigue (including brain fog) and neurodivergence (ADHD, Autism). Example project: *Exploring autonomic and neural mechanistic overlap between neurodivergence and complex PTSD*

Further information about BSMS researchers and research interests can be obtained on <http://www.bsms.ac.uk/research/>.

Post-holders whose research involves close contact with patient populations (e.g. in the fields of neurology, oncology or psychiatry) will be affiliated to the appropriate clinical teams and will have both clinical and technical supervisors.

Remuneration will be according to Clinical Lecturer Grades which corresponds to Specialist Trainee grades within the NHS.

Research duties include:

- Development of project hypotheses and experimental designs.
- Summarising data and presenting findings at scientific meetings.
- Identification of eligible patients and obtaining informed consent.
- Where appropriate, attendance at specialist clinics.
- Supervision of image data acquisition and administration of contrast material.
- Image processing and analysis.
- Facilitate the research endeavours of others in the research group, possibly including supervision of undergraduate project students.
- Liaise with research collaborators.
- Write or participate in the writing of reports, publications, and project grants, including submission of projects for ethical and NHS Trust approval in accordance with the research governance framework.
- Participate in ongoing prospective projects in PET-dynamic contrast enhanced CT and obtaining informed consent.
- Participate in organising internal seminars with internal and external speakers.
- Keep abreast of current developments in the area of research.

Clinical duties include:

- Providing initial medical attention (and resuscitation when necessary) in the event of a medical emergency within CISC. Minimal level required is ILS.
- Assisting CISC radiographers with difficult venous cannulation.
- Giving advice to CISC radiographers on day-to-day medical issues, as they arise, including those specifically related to PET-CT.
- Communicating with nuclear medicine consultants/radiologists concerning issues related specifically to clinical PET-CT or diagnostic MRI and CT.
- Support Research projects and clinical trials that require medical supervision

Teaching duties may include:

- Preparation of image-based teaching resources.
- Assistance with image practical classes and student selected components.
- Delivery of imaging seminars for medical undergraduates in the dissection room.

The post does not include on-call duties but the post holder will be expected to be flexible on their working hours to meet the clinical needs of the Centre. The Centre is moving towards working hours of 08.00 – 20.00 Monday-Fridays and the CRF's are required to provide clinical cover for the Centre on a rota basis. This will include cover for annual leave, study leave and other periods of absence of the other CISC CRF.

There are no opportunities to undertake additional clinical work outside CISC during the 37.5 hours (notional) contracted hours per week for this post. However, it is possible for the post-holder to join an on-call rota or undertake locum work providing there is no impact on the post-holder's CISC duties or research activity.

## 5. Person Specification

### Skills/Abilities

	Essential	Desirable
Ability to communicate and present research results within own group, through publications and other recognised forms of output.	X	
Good organisational skills and the ability to manage several tasks simultaneously.	X	
Computer skills including familiarity with word processing, spreadsheet and e-mail packages (e.g. Word, Excel and Outlook).	X	
Familiarity with statistical software packages.		X
Ability to undertake resuscitation in the event of a medical emergency (ILS level).	X	
Ability to undertake resuscitation in the event of a medical emergency (ALS level).		X (essential within 12 months)
Ability to acquire new skills as necessary.	X	

### Knowledge

	Essential	Desirable
Knowledge of Good Clinical Practice	X	
Knowledge of Research Governance and Research Ethics	X	
Knowledge of the potential adverse effects of radiographic contrast materials	X	

### Experience

	Essential	Desirable
Completion of medical Foundation training or equivalent.	X	
Experience of teaching undergraduate medical students		X
Prior experience of imaging research, including familiarity with data analysis and software packages relevant to the post-holder's particular specialty and field of research.		X
Previous research publications or abstracts		X
Experience of clinical PET-CT		X

## 6. Qualifications

	Essential	Desirable
Medical degree	X	
B.Sc or M.Sc		X
GMC	X	

MRCP		X
Basic Life Support	X	
Intermediate Life Support	X	
Advanced Life Support		X (essential within 12 months)

## 7. Personal Attributes / Other

	Essential	Desirable
Be a keen and innovative researcher	X	
Be a first class communicator and display excellent interpersonal skills	X	
Be a reliable and responsible team worker with good organisational skills	X	
Show self-motivation and a commitment to continuous career development	X	
Flexibility to work outside of normal hours	X	
Empathy and patience	X	
Able to work under pressure and to dead-lines	X	
Disclosure and Barring Service (DBS) check	X	

This job description sets out the duties of the post at the time it was drawn up. Such duties may vary from time to time without changing the general character of the duties or level of responsibility entailed. Such variations are a common occurrence and cannot of themselves justify a reconsideration of the grading of the post.